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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,142	04/24/2001	Kenji Kataoka	ND-387US	4404

466 7590 10/01/2002

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EXAMINER

KITOV, ZEEV

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 10/01/2002

#5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,142

Applicant(s)

KATAOKA, KENJI

Examiner

Zeev Kitov

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6 - 8 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Objection

1. Specification is objected to due to some misspelling and lack of space between words. Specifically, in page 2, line 11, a phrase "when the connector is not in a non-conducting state" should be replaced by "when the connector is in non-conducting state". Spacing should separate on page 4, line 8, the words "the switching mechanism may". Appropriate correction is required.

2. A disclosure is objected to due to use of term "electrostatic breakdown prevention" in a title and specification. According to disclosure, an invented apparatus is intended to provide protection against transients in conditions of hot-plugging (hot swapping) smoothing wave-shape of communication signals, as illustrated in Fig. 2. Appropriate correction is required. The following title is suggested: "Hot-plugging (hot swapping) connector apparatus (optionally, for communication lines)".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Golf et al. in a view of Gauthier. Golf et al. discloses most of the elements of Claim 1, including a connector (elements 26 in Fig. 1 are contacts of connector), a switching mechanism (elements 54 and 52 in Fig. 1). He further discloses switching of a communication system (col. 1, lines 10 – 27) wherein signal lines are obviously switched by plugging/unplugging a card and the switching mechanism provided on the connector (elements 52 and 54 in Fig. 1). But Golf et al. does not disclose a switched smoothing circuit. Gauthier discloses a smoothing circuit (elements R21, R22, C21 and C22 in Fig. 3) and a switch for stopping the smoothing function of the circuit when the connector is connected (resistors R21 and R22 are short circuited by switched-on transistors T11 and T12) but restoring the smoothing function when the connector is disconnected (transistors are switched-off releasing resistors R21 and R22 to perform their low-pass filtering). Both patents have the same problem solving area, namely providing protection for electronic equipment in the hot swapping process. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used smoothing filter of Gauthier in the circuit Golf et al., because as Gauthier states (see an Abstract), his solution of slow change of input impedance helps to protect electronic equipment from disturbances caused by connecting to or disconnecting from it an electronic system (hot plugging).

Regarding Claim 2, a combined circuit disclosed by Golf et al. can be placed on either side of the connector.

Regarding Claim 4, Gauthier discloses the resistors (elements R21 and R22 in Fig. 3) and capacitors connected to ground line (elements C21 and C22 in Fig. 3).

Regarding Claim 6, Golf et al. discloses a lead switch (element 52 in Fig. 1) and magnet (element 54 in Fig. 1). The lead switch in a circuit of Gauthier is operative to connect the load directly to the power supply and therefore to the grounding line (element 10 in Fig. 3).

Regarding Claim 7, Gauthier discloses a solution applicable for switching of plurality of lines (see Fig. 3).

Regarding Claim 8, both Golf et al. and Gauthier disclose hot plugging of printed circuit boards, which in fact represent portable apparatus.

Allowable Subject Matter

4. Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record not relied upon is considered pertinent to applicant's disclosure

- US Patent 5,619,076 – Method and apparatus for connection and disconnection of batteries to uninterruptible power systems and the like – Layden et al.,


- US Patent 4,882,554 – Multi-drop type bus line system – Akaba et al.,
- US Patent 5,556,290 – Self-switching connector for electronic systems
– Northey et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose telephone number is (703) 305-0759. The examiner can normally be reached on 8:00 – 4:30.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-3119. The fax phone numbers for organization where this application or proceedings is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Z.K.
9/20/2002



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
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